THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

- 1. A fumigant/sterilant comprising an effective amount of cyanogen mixed with a predetermined quantity of carbon dioxide such that in use, the fumigant/sterilant remains below its flammability limit.
- 2. A fumigant /sterilant according to claim 1, wherein said cyanogen is in the form of a liquefied gas.
- 3. A fumigant/sterilant according to claim 1 or 2, wherein said carbon dioxide is gaseous carbon dioxide.
- 10 4. A fumigant/sterilant according to claim 1 or 2, wherein said carbon dioxide is liquid carbon dioxide.
 - 5. A fumigant/sterilant according to any one of claims 1 to 4, comprising 1 to 26 wt% of cyanogen and 99 to 72 wt % of carbon dioxide.
- 6. A fumigant according to claim 5, comprising 1 to 20% cyanogen and 99 to 80% of carbon dioxide.
 - 7. A fumigant/sterilant according to any one of claims 1 to 6, wherein said cyanogen is mixed with said carbon dioxide on site or as a prepackaged product.
 - 8. A fumigant/sterilant according to any one of claims 1 to 7, wherein said cyanogen is mixed with said carbon dioxide in an industrial gas cylinder.
- 20 9. A method of producing a fumigant /sterilant comprising mixing an effective amount of cyanogen with a predetermined quantity of carbon dioxide such that in use, the fumigant/sterilant remains below its flammability limit.
 - 10. A method according to claim 8, wherein said cyanogen is in the form of a liquefied gas.
- 25 11. A method according to claim 8 or 9, wherein said carbon dioxide is gaseous carbon dioxide.
 - 12. A method according to claim 8 or 9, wherein said carbon dioxide is liquid carbon dioxide.
- 13. A method according to any one of claims 8 to 12, wherein 1 to 26 wt% of cyanogen is mixed with 99 to 72 wt % of carbon dioxide.
 - 14. A method according to claim 13, wherein 1 to 20% cyanogen is mixed with 99 to 80% of carbon dioxide.

- 15. A method according to any one of claims 9 to 14, wherein said cyanogen is mixed with said carbon dioxide on site or as a prepackaged product.
- 16. A method according to any one of claims 9 to 14, wherein said cyanogen is mixed with said carbon dioxide in an industrial gas cylinder.
- 5 17. Use of a fumigant/sterilant according to any one of claims 1 to 8, for fumigating and/or sterilising soil or commodities.
 - 18. Use of a fumigant according to claim 17, for post-harvest fumigation and/or sterilisation.
 - 19. Use according to claim 17, wherein said commodity is timber.
- 10 20. Use of a fumigant/sterilant according to any one of claims 1 to 8, for confined space soil or commodity fumigation and /or sterilisation.